



NOAA Teacher at Sea
James Miller
Onboard NOAA Ship RAINIER
August 13 - 27, 2005

Log 7

Day 9: Sunday, August 21, 2005

Location: Anchored Northeast side of Mitrofinia Island

Weather: Sun and clouds, low 60's

Wind: 5-10kts

Seas: Calm

Itinerary: Working around Mitrofinia Island

Science and Technology Log

To ensure completion of some of the longer lines located further out in the open ocean, the ship spent the day running surveying lines. The RAINIER is also fitted with sonar transducers and is used when the lines are 8 miles or longer. I was assigned to work in the plotting room with the surveyors cleaning up data that was collected the previous day.

Many processing steps must be performed on the bottom contour data before it makes it onto a chart. On the ship, the surveyor performs a basic "cleaning" of the data with powerful computers, and very sophisticated software. The surveyors pull up the bottom contour data on the screen and analyze it for stray signals. It is very cool software because they look at the bottom in 3-D and from any angle. At first it doesn't look like much but a chaotic grouping of lines; however, after the surveyor selects areas and stray signals to cut out, the bottom contour emerges. The surveyor definitely develops an eye for understanding these 3-D images, but it didn't take long before I was performing some of the basic cleaning tasks. I also downloaded some of the images onto a disk to be used in a PowerPoint presentation.

I had an interesting conversation with one of the surveyors whose background is geology. He said that this entire area is a geologists dream. He described how much of the area was probably formed by Mt. Veniaminof volcano, which is visible in the distance and is still active. The thing is immense and stands above all the other surrounding mountains. Additionally, he has also seen clear evidence of structures formed by seismic activity.

Personal Log

It was actually nice to have a day off from the launches. I had time to do some laundry and get caught up with some e-mails. I'm definitely used to the daily routine and I've finally learned all the crew and officers names and responsibilities.

We're scheduled to leave the area in the afternoon tomorrow because of very poor weather forecasts. Winds to 40kts seem to make the captain a bit nervous, so we're going to run for cover in Chignik Bay on the peninsula about 80 miles or so northeast of the Mitrofinia Island. Since it might be my last opportunity to fish, after dinner I went out to the fantail to try for halibut. I was determined and planned to put in some serious



time. After about a half hour I hooked and landed a 25-pounder, and then ten minutes later lost a 15-pounder. Then within another 20 minutes I caught one about the same size as the first. By this time many of the crew started fishing. I saw LT Evans wrestling with a fish on the other side of the boat. It was apparent he had something big, so I put my rod down to watch as he slowly reeled it up. About 20 minutes later this hulk of a

halibut appeared, it was huge. It took two harpoons, and me and another guy to haul the fish up onto the boat. We didn't have a scale but it was estimated at over 100 pounds. It also took all night for LT Evans to clean it and bag it.